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09/574,569	05/17/2000	Robert I.G. McLean	C1197-991100	7629

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EXAMINER

DASS, HARISH T

ART UNIT PAPER NUMBER

3693

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/574,569

Applicant(s)

MCLEAN ET AL.

Examiner

Harish T. Dass

Art Unit

3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Attachement A.

Art Unit: 3693

DETAILED ACTION

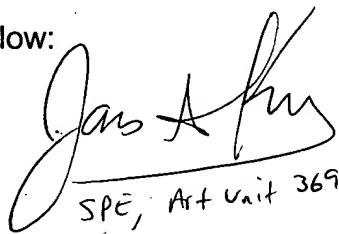
In view of the Appeal Brief filed on April 11, 2006, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final), or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:


SPE, Art Unit 3693 1/17/07

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 9, 17, 21, 29, 37, and 44, are rejected under 35 U.S.C. § 101 because the claimed invention is directed to a non-statutory subject matter. Claims 1-52 do not produce "concrete" results and have no utilities.

Art Unit: 3693

Independent claims 1, 9, 17, 21, 29, 37, and 44 have no tangible results, the claims stop without outputs and do not produce "concrete" end results with utilities.

Claim 1 has no tangible result, the claim stops at "determining, by use of the computer system, a second present value of the future financial value stream taking into account the one or more assumed variables that changed in response to the occurrence or non-occurrence of the one or more of the future events. None of the limitations have been applied to produce a concrete result (i.e. No result is displayed, nothing is provide as a result of the process as an output, or etc,). Therefore, claim 1 has no tangible result and does not produce a concrete result with utility as of method claimed.

Claim 9 has no tangible result, the claim stops at "forming a second aggregate present value of the plurality of future financial value streams taking into account the one or more assumed variables that changed in response to the occurrence or non-occurrence of the one or more of the future events". None of the limitations have been applied to produce a concrete result (i.e. No result is displayed, nothing is provide as a result of the process as an output, or etc,). Therefore, claim 9 has no tangible result and does not produce a concrete result with utility as of method claimed.

Claim 17 has no tangible result, the claim stops at "attributing the variance between the first present value and the second present value to events that occurred between the first and second specified dates". None of the limitations have been applied to produce a concrete result (i.e. No result is displayed, nothing is provide as a result of the process as an output, or etc,). Therefore, claim 17 has no tangible result and does not produce a concrete result with utility as of method claimed.

Claim 21 has no tangible result, the claim stops at "determining, by use of the computer system, a present value of the future financial value stream of the business enterprise from the perspective of the selected stakeholder by aggregating the influences on the future financial value stream attributable to the assumed variables and adjusting the future financial value stream for a time value of money". None of the limitations have been applied to produce a concrete result (i.e. No result is displayed, nothing is provide as a result of the process as an output, or etc.). Therefore, claim 21 has no tangible result and does not produce a concrete result with utility as of method claimed.

Claim 29 has no tangible result, the claim stops at "determining, by use of the computer system, a second present value of the future financial value stream taking into account the one or more assumed variables that changed in response to the occurrence or non-occurrence of the one or more of the future events". None of the limitations have been applied to produce a concrete result (i.e. No result is displayed, nothing is provide as a result of the process as an output, or etc.). Therefore, claim 29 has no tangible result and does not produce a concrete result with utility as of method claimed.

Claim 37 has no tangible result, the claim stops at "comparing the present value of the future financial value stream based upon the alternate scenario to the first present value of the future financial value stream based upon the base case scenario". None of the limitations have been applied to produce a concrete result (i.e. No result is displayed, nothing is provide as a result of the process as an output, or etc.). Therefore, claim 37 has no tangible result and does not produce a concrete result with utility as of

Art Unit: 3693

method claimed.

Claim 44 has no tangible result, the claim stops at "repeatedly determining and presenting a series of updated present values of the future financial value stream, each updated present value determined from the events and assumed variables in the data structure including any assumed variables that have changed in response to the occurrence or non-occurrence of one or more of the future events". None of the limitations have been applied to produce a concrete result (i.e. No result is displayed, nothing is provide as a result of the process as an output, or etc.). Therefore, claim 44 has no tangible result and does not produce a concrete result with utility as of method claimed.

The unknown results of applicant's invention is clearly not the same results found in *State Street Bank & Trust Co. V. Signature Financial group, Inc.*, 149 F 3d 1371, 47 USPQ 2d 1599 decided by the U.S. Courts of Appeals. "Today we hold the transformation of data representing discrete dollar amounts by a machine through a series of mathematical calculations into a final share price constitutes a practical application of a mathematical algorithm, formula or calculation because it produces a useful, concrete and tangible result, a final share price momentarily fixed for recording and reporting purposes". In the *State Street* case the "concrete, tangible, and useful results" is allocating money to different funds.

In the *AT&T v. Excel Communications* the useful, concrete, and tangible results is the claimed step of "producing message record for long distance telephone calls, enhanced by addition of Primary Interexchange Carrier (PIC) indicator". The system performs

Art Unit: 3693

different calculations and the result facilitates differential billing of calls made by the subscriber to long distance service carrier.

In the present application, the disclosure is nothing more than generalities as to various basic financial calculations (present value/future value). However, the disclosure is short on specifics as to explicitly how the result is used. Therefore, it is clear from the definition of "concrete" and the claimed limitations of the present invention mentioned above that the disclosure of the present invention is nothing more than generalizations regarding the various determination, and it is short on any particular or specific direction or guidance in achieving the desired results and in providing a concrete result which should be useful. Consequently, the claims are analyzed based upon the underlying process and thus rejected as being directed to a non-statutory process.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-11, 13-24, 26-30, 32-39, 41-46 and 48-52 are rejected under 35

U.S.C. 103(a) as being unpatentable over Sandretto (US 5,812,988).

Re. Claim 1, Sandretto discloses developing a data structure including one or more assumed variables that have an influence on a future financial value stream of the

Art Unit: 3693

business enterprise and at least one future or, past event for each assumed variable that influences the corresponding assumed variable [Figures 1 (#10, 30,50), 2 (#180, 190, 250), col. 9 lines 46-55, col. 10 lines 9-23 (coupon rate, interest payment date, maturity date, etc.)],

determining a first present value of the future financial value stream of the business enterprise by aggregating the influences on the future financial value stream attributable to the assumed variables and adjusting the future financial value stream for a time value of money [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30 (projected cash flows ... NPV's is determined for first bond), (cash flows for each segment and each bond issue of a company are summed)],

determining a second present value of the future financial value stream taking into account the one or more assumed variables [col. 10 lines 9-23, col. 19 line 63 to col. 20 line].

Sandretto implicitly discloses determining, in response to the occurrence (inflation may rise/fall (see adjusting inflation), interest may go up/down (adjusting interest), economy may grow, default premiums) or non-occurrence of one or more of the future events, whether one or more of the assumed variables have changed and whether the influenced future financial value stream has changed [see Figure 2 (# 200, 290-324), col. 2 lines 44-59, col. 3 lines 8-38, col. 6 lines 14-30, col. 10 lines 44-48, etc], and

determining a second present value of the future financial value stream (additional set) taking into account the one or more assumed variables that changed in

Art Unit: 3693

response to the occurrence (inflation may rise/fall, interest may go up/down, economy may grow, default premiums) or non-occurrence of the one or more of the future events (inflation may rise/fall, interest rate may go up/down) [col. 2 lines 44-59, col. 3 lines 8-38, col. 10 44-48, etc]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Sandretto and include empirical analysis of iterative and regression process and calculate variance of simulated variables (adjusting it to + -) that influence the returns on each type assets and optimize allocation of the assets or funds.

Re. Claim 2, Sandretto discloses wherein determining the first present value further comprises adjusting the future financial value stream by an assessed probability (likelihood) that the influences on the future financial value stream will be realized, and determining the second present value further comprises adjusting the future financial value stream by an assessed probability that the influences on the future financial value stream will be realized taking into account an assessed probability that changed in response to the occurrence or non-occurrence of the one or more of the future events [col. 6 line 60 to col. 15, col. 14 line 30 to col. 15 line 19].

Re. Claim 3, Sandretto discloses wherein the future financial value stream is associated with activities of the business enterprise necessary to give rise to the events associated with the future financial value stream [col. 34 line 51 to col. 35 line 33].

Re. Claim 5, Sandretto discloses changing one or more of the assumed variables, to form an alternate scenario including the changed assumed variables, determining the present value of the future financial value stream based upon the alternate scenario, and comparing the present value of the future financial value stream based upon the alternate scenario to the first present value of the future financial value stream based upon the base case scenario [Figure 1 (#130-164), col. 19 lines 24-45, Col. 2 lines 44-59, col. 36 lines 32-51].

Re. Claim 6, Sandretto discloses further comprising selecting a stakeholder perspective (financial statements, balance sheet) from among a plurality of stakeholder perspectives for determining the first and second present values of the future financial value stream [Figures 11-14, col. 34 lines 6-50, col. 36-52, col. 38 lines 20-35].

Re. Claim 7, Sandretto discloses further comprising selecting two or more stakeholder perspectives from among a plurality of stakeholder perspectives for determining the first and second present values of the future financial value stream [Figures 11-14, col. 34 lines 6-50, col. 36-52 (see book values, financial statements, income statement)].

Re. Claim 8, Sandretto discloses determining a variance between the first present value and the second present value taking into account the time value of money between the first and second dates, and attributing the variance between the first present value and

Art Unit: 3693

the second present value to events that occurred between the first and second dates [col. 29 lines 52-64, col. 30 lines 5-53, col. 39 lines 42-51].

Re. Claim 9, Sandretto discloses developing a data structure including a plurality of future financial value streams, each future financial value stream having one or more assumed variables that have an influence on a future financial value stream of the business enterprise and at least one future or past event for each assumed variable that influences the corresponding assumed variable [Figures 1 (#10, 30,50), 2 (#180, 190, 250), col. 9 lines 46-55, col. 10 lines 9-23],

determining a present value of each future financial value stream by aggregating the influences on the future financial value stream attributable to the assumed variables of the future financial value streams and adjusting the future financial value streams for a time value of money [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30 - (see cash flows for each segment and each bond issue of a company are summed)],

aggregating the present value of each future financial value stream to form a first aggregate present financial value of the plurality of future financial value streams [Figures 13-14 (cashflows), col. 20 lines 52-60, col. 35 lines 36-42],

Sandretto implicitly discloses determining, in response to the occurrence (inflation may rise/fall, interest may go up/down, economy may grow, default premiums) or non-occurrence of one or more of the future events for one or more of the future financial value streams, whether one or more of the assumed variables have changed and

Art Unit: 3693

whether the influenced future financial value stream has changed [Figure 2 (# 200, 290-324), col. 2 lines 44-59, col. 3 lines 8-38, col. 6 lines 14-30, col. 10 lines 44-48, etc], and forming a second aggregate present value of the plurality of future financial value streams (additional set) taking into account the one or more assumed variables that changed in response to the occurrence or non-occurrence of the one or more of the future events [col. 2 lines 44-59, col. 3 lines 8-38, col. 10 44-48, col. 23 lines 12-24, etc]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Sandretto and include iterative and regression process and calculate variance of simulated variables (adjusting it to +/-) that influence the returns on each type assets and optimize allocation of the assets or funds.

Re. Claim 10, Sandretto discloses wherein determining the present value of each future financial value stream further comprises adjusting the future financial value stream by an assessed probability that the influences on the future financial value stream will be realized [col. 6 line 60 to col. 15, col. 14 line 30 to col. 15 line 19].

Re. Claim 11, Sandretto discloses wherein each of the plurality of future financial value streams is associated with activities of the business enterprise necessary to give rise to the events associated with the corresponding future financial value stream [col. 34 line 51 to col. 35 line 33].

Art Unit: 3693

Re. Claim 13, Sandretto discloses changing one or more of the assumed variables, to form an alternate scenario including the changed assumed variables,

determining an aggregate present value of the plurality of future financial value streams based upon the alternate scenario, and

comparing the aggregate present value of the plurality of future financial value streams based upon the alternate scenario to the first aggregate present value of the plurality of future financial value streams based upon the base case scenario [Figure 1 (#130-164), col. 19 lines 24-45, Col. 2 lines 44-59, col. 36 lines 32-51].

Re. Claim 14, Sandretto discloses selecting a stakeholder perspective from among a plurality of stakeholder perspectives for determining the first and second aggregate present value of the plurality of future financial value streams [col. 34 lines 6-50, col. 36-52].

Re. Claim 15, Sandretto discloses selecting two or more stakeholder perspectives from among a plurality of stakeholder perspectives for determining the first and second aggregate present value of the plurality of future financial value streams [Figures 11-14, col. 34 lines 6-50, col. 36-52 (book value)].

Re. Claim 16, Sandretto discloses determining a variance between the first aggregate present value and the second aggregate present value taking into account the time value of money between the first and second dates, and attributing the variance

Art Unit: 3693

between the first aggregate present value and the second aggregate present value to events that occurred between the first and second dates [col. 29 lines 52-64, col. 30 lines 5-53, col. 39 lines 42-51].

Re. Claim 17, Sandretto discloses developing a data structure including one or more assumed variables that have an influence on a future financial value stream of the business enterprise and at least one future or past event for each assumed variable that influences the corresponding assumed variable [Figures 1 (#10, 30,50), 2 (#180, 190, 250); col. 9 lines 46-55, col. 10 lines 9-23],

determining a first present value of the future financial value stream of the business enterprise as of a first specified date by aggregating the influences on the future financial value stream attributable to the assumed variables and adjusting the future financial value stream for a time value of money [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30],

determining a second present value of the future financial value stream of the business enterprise as of a second specified date by aggregating the influences on the future financial value stream attributable to the assumed variables and adjusting the future financial value stream for a time value of money [col. 10 lines 9-23, col. 19 line 63 to col. 20 line],

determining a variance between the first present value and the second present value taking into account a time value of money between the first and second dates [col. 29 lines 52-64, col. 30 lines 5-53, col. 39 lines 42-51, col. 24 line 56 to col. 25 line 5].

Art Unit: 3693

Sandretto implicitly discloses attributing the variance between the first present value and the second present value to events that occurred between the first and second specified dates [col. 24 line 56 to col. 25 line 5, col. 29 lines 52-64, col. 30 lines 5-53, col. 39 lines 42-51]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Sandretto and include empirical analysis of iterative and regression process and calculate variance for specific dates to achieve the objective of particular analysis and business requirement.

Re. Claim 18, Sandretto discloses determining a first present value further comprises adjusting the future financial value stream by an assessed probability that the influences on the future financial value stream will be realized, and determining the second present value further comprises adjusting the future financial value stream by an assessed probability that the influences on the future financial value stream will be realized [col. 6 line 60 to col. 15, col. 14 line 30 to col. 15 line 19].

Re. Claim 19, Sandretto discloses selecting a stakeholder perspective from among a plurality of stakeholder perspectives for determining the first and second present values of the future financial value stream [col. 34 lines 6-50, col. 36-52].

Re. Claim 20, Sandretto discloses determining a present value of each of a plurality of additional future financial value streams [col. 22 line 27 to col.23line 43], and

aggregating the present value of the future financial value stream and the plurality of additional future financial value streams to form an aggregate present financial value of future financial values streams [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30].

Re. Claim 21, Sandretto discloses historical data may be used to determine a company's financing behavior [col. 38 lines 33-35],

developing a data structure including one or more assumed variables that have an influence on the future financial value stream of the business enterprise from the perspective of the selected stakeholder and at least one future or past event for each assumed variable that influences the corresponding assumption [Figures 1 (#10, 30,50), 2 (#180, 190, 250), col. 9 lines 46-55, col. 10 lines 9-23 (coupon rate, interest payment date, maturity date, etc.), col. 18 lines 35-63 (evaluating bonds), col. 38 lines 29-35], and

determining a present value of the future financial value stream of the business enterprise from the perspective of the selected stakeholder by aggregating the influences on the future financial value stream attributable to the assumed variables and adjusting the future financial value stream for a time value of money [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30 (projected cash flows ... NPV's is determined for first bond)].

Sandretto implicitly discloses selecting a stakeholder perspective from among a plurality of stakeholder perspectives for determining a present value of a future financial

Art Unit: 3693

value stream of the business enterprise [Figures 10-14, col. 38 lines 20-52]. It would have been obvious at the time the invention was made in order to use the enterprise financial statement, the analyst must select the perspectives of companies that are interest to the analyst (business choice) based on the analyst knowledge and information. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Sandretto and include a condition for selecting perspective of companies that meet certain business criteria interested to the analyst.

Re. Claim 22, Sandretto discloses wherein determining the present value further comprises adjusting the future financial value stream by an assessed probability that the influences on the future financial value stream will be realized [col. 6 line 60 to col. 15, col. 14 line 30 to col. 15 line 19].

Re. Claim 23, Sandretto discloses wherein the future financial value stream is associated with activities of the business enterprise necessary to give rise to the events associated with the future financial value stream [col. 34 line 51 to col. 35 line 33].

Re. Claim 24, Sandretto discloses 24. The method according to claim 21, further comprising selecting one or more additional stakeholder perspectives from among the plurality of stakeholder perspectives for determining the first present value of the future financial value stream [Figures 11-14, col. 34 lines 6-50, col. 36-52, col. 38 lines 20-35].

Re. Claim 26, Sandretto discloses changing one or more of the assumed variables, to form an alternate scenario including the changed assumed variables, determining the present value of the future financial value stream based upon the alternate scenario, and comparing the present value of the future financial value stream based upon the alternate scenario to the first present value of the future financial value stream based upon the base case scenario [Figure 1 (#130-164), col. 19 lines 24-45, Col. 2 lines 44-59, col. 36 lines 32-51].

Re. Claim 27, Sandretto discloses determining a present value of each of a plurality of additional future financial value streams from the perspective of the selected stakeholder [Figures 11-14, col. 34 lines 6-50, col. 36-52, col. 38 lines 20-35], and aggregating the present value of the future financial value stream and the plurality of additional future financial value streams to form an aggregate present financial value of future financial values streams [col. 2 lines 44-59, col. 3 lines 8-38, col. 10 44-48, col. 23 lines 12-24, etc – see also total cash].

Re. Claim 28, Sandretto discloses repeatedly (iteratively) determining and presenting a series of updated present values of the future financial value stream, each updated present value determined from the events and assumed variables in the data structure [Figure 3, col. 3 lines 8-26, col. 13 lines 1-8 – see iterative process, interest rate, inflation, cashflow]. Sandretto implicitly discloses including any assumed variables that

Art Unit: 3693

have changed in response to the occurrence (inflation may rise/fall (see adjusting inflation), interest may go up/down (adjusting interest), economy may grow, default premiums) or non-occurrence of one or more of the future events [Figure 2 (# 200, 290-324), col. 2 lines 44-59, col. 3 lines 8-38, col. 6 lines 14-30, col. 10 lines 44-48, etc]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Sandretto and include empirical analysis of iterative and regression process and calculate variance of simulated variables (adjusting it to +/-) that influence the returns on each type assets and optimize allocation of the assets or funds.

Re. Claim 29, Sandretto discloses developing a data structure including one or more assumed variables that have an influence on a future financial value stream of the business enterprise and at least one future or past event for each assumed variable that influences the corresponding assumed variable [Figures 1 (#10, 30,50), 2 (#180, 190, 250), col. 9 lines 46-55, col. 10 lines 9-23 (coupon rate, interest payment date, maturity date, etc.)],

identifying and segregating risks specific to the future financial value stream from risks specific to the business enterprise or industry as a whole [col. 37 lines 35-49],

assigning probabilities to the events or assumed variables based on the identified risks [col. 37 lines 35-67, col. 6 line 60 to col. 15, col. 14 line 30 to col. 15 line 19 – see assumed variables and risk of interest rate or inflation],

determining a first present value of the future financial value stream of the business enterprise by aggregating the influences on the future financial value stream attributable to the assumed variables, adjusting the future financial values stream by the assigned probabilities, and further adjusting the future financial value stream for a time value of money [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30],

Sandretto implicitly discloses determining, in response to the occurrence or non-occurrence of one or more of the future events, whether one or more of the assumed variables have changed and whether the influenced future financial value stream has changed, and

determining a second present value of the future financial value stream taking into account the one or more assumed variables that changed in response to the occurrence or non-occurrence of the one or more of the future events [see Figure 2 (#200, 290-324), col. 2 lines 44-59, col. 3 lines 8-38, col. 6 lines 14-30, col. 10 lines 44-48, etc]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Sandretto and include empirical analysis of iterative and regression process and calculate variance of simulated variables (adjusting it to +/-) that influence the returns on each type assets and optimize allocation of the assets or funds.

Art Unit: 3693

Re. Claim 30, Sandretto discloses wherein the future financial value stream is associated with activities of the business enterprise necessary to give rise to the events associated with the future financial value stream [col. 34 line 51 to col. 35 line 33].

Re. Claim 32, Sandretto discloses changing one or more of the assumed variables, to form an alternate scenario including the changed assumed variables, determining the present value of the future financial value stream based upon the alternate scenario, and comparing the present value of the future financial value stream based upon the alternate scenario to the first present value of the future financial value stream based upon the base case scenario [Figure 1 (#130-164), col. 19 lines 24-45, Col. 2 lines 44-59, col. 36 lines 32-51].

Re. Claim 33, Sandretto discloses selecting a stakeholder perspective (financial statement, balance sheet) from among a plurality of stakeholder perspectives for determining the first and second present values of the future financial value stream [Figures 11-14, col. 34 lines 6-50, col. 36-52, col. 38 lines 20-35].

e. Claim 34, Sandretto discloses selecting two or more stakeholder perspectives from among a plurality of stakeholder perspectives for determining the first and second present values of the future financial value stream [Figures 11-14, col. 34 lines 6-50, col. 36-52 (see book values, financial statements, income statement)].

Art Unit: 3693

Re. Claim 35, Sandretto discloses determining a variance between the first present value and the second present value taking into account the time value of money between the first and second dates, and attributing the variance between the first present value and the second present value to events that occurred between the first and second specified dates [col. 29 lines 52-64, col. 30 lines 5-53, col. 39 lines 42-51].

Re. Claim 36, Sandretto discloses determining a present value of each of a plurality of additional future financial value streams [col. 22 line 27 to col.23line 43], and aggregating the present value of the first future financial value stream and the plurality of additional future financial value streams to form an aggregate present financial value of future financial values streams [col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30].

37. A method of processing data relating to the performance of a business enterprise in creating value, comprising:

developing a data structure including one or more assumed variables that have an influence on a future financial value stream of the business enterprise and at least one future or past event for each assumed variable that influences the corresponding assumed variable [Figures 1 (#10, 30,50), 2 (#180, 190, 250), col. 9 lines 46-55, col. 10 lines 9-23 (coupon rate, interest payment date, maturity date, etc.)],

determining a present value of the future financial value stream of the business enterprise by aggregating the influences on the future financial value stream attributable

Art Unit: 3693

to the assumed variables and adjusting the future financial value stream for a time value of money, wherein the events and assumed variables collectively form a base case scenario for the business enterprise, and the first present value of the future financial value stream is based upon the base case scenario [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30 - (see cash flows for each segment and each bond issue of a company are summed), see step 1330],

changing one or more of the assumed variables, to form an alternate scenario including the changed assumed variables, determining the present value of the future financial value stream based upon the alternate scenario, and comparing the present value of the future financial value stream based upon the alternate scenario to the first present value of the future financial value stream based upon the base case scenario [Figure 1 (#130-164), col. 19 lines 24-45, Col. 2 lines 44-59, col. 36 lines 32-51, see step 1330].

Re. Claim 38, Sandretto discloses wherein determining the present value further comprises adjusting the future financial value stream by an assessed probability that the influences on the financial value stream will be realized [col. 6 line 60 to col. 15, col. 14 line 30 to col. 15 line 19].

Re. Claim 39, Sandretto discloses wherein the future financial value stream is associated with activities of the business enterprise necessary to give rise to the events associated with the future financial value stream [col. 34 line 51 to col. 35 line 33].

Re. Claim 41, Sandretto discloses selecting a stakeholder perspective from among a plurality of stakeholder perspectives for determining the present value of the future financial value stream [col. 34 lines 6-50, col. 36-52].

Re. Claim 42, Sandretto discloses selecting two or more stakeholder perspectives from among a plurality of stakeholder perspectives for determining the present value of the future financial value stream [col. 34 lines 6-50, col. 36-52].

Re. Claim 43, Sandretto discloses determining a present value of each of a plurality of additional future financial value streams [col. 22 line 27 to col.23line 43], and

aggregating the present value of the first future financial value stream and the plurality of additional future financial value streams to form an aggregate present financial value of future financial values streams [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30].

Re. Claim 44, Sandretto discloses developing a data structure including one or more assumed variables that have an influence on a future financial value stream of the business enterprise and at least one future or past event for each assumed variable that influences the corresponding assumed variables [Figures 1 (#10, 30,50), 2 (#180, 190, 250), col. 9 lines 46-55, col. 10 lines 9-23 (coupon rate, interest payment date, maturity date, etc.), col. 18 lines 35-63 (evaluating bonds), col. 38 lines 29-35],

Art Unit: 3693

determining a first present value of the future financial value stream of the business enterprise by aggregating the influences on the future financial value stream attributable to the assumed variables and adjusting the future financial value stream for a time value of money [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30], and

repeatedly determining and presenting a series of updated present values of the future financial value stream, each updated present value determined from the events and assumed variables in the data structure [Figure 3, col. 3 lines 8-26, col. 13 lines 1-8 – see iterative process, interest rate, inflation, cashflow]. Sandretto implicitly discloses including any assumed variables that have changed in response to the occurrence (inflation may rise/fall (see adjusting inflation), interest may go up/down (adjusting interest), economy may grow, default premiums) or non-occurrence of one or more of the future events [Figure 2 (# 200, 290-324), col. 2 lines 44-59, col. 3 lines 8-38, col. 6 lines 14-30, col. 10 lines 44-48, etc]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Sandretto and include empirical analysis of iterative and regression process and calculate variance of simulated variables (adjusting it to +/-) that influence the returns on each type assets and optimize allocation of the assets or funds.

Re. Claim 45, Sandretto discloses wherein determining the first present value and determining each updated present value further comprise adjusting the future financial

Art Unit: 3693

value stream by an assessed probability that the influences on the future financial value stream will be realized [col. 6 line 60 to col. 15, col. 14 line 30 to col. 15 line 19].

Re. Claim 46, Sandretto discloses wherein the future financial value stream is associated with activities of the business enterprise necessary to give rise to the events associated with the future financial value stream [col. 34 line 51 to col. 35 line 33].

Re. Claim 48, Sandretto discloses changing one or more of the assumed variables, to form an alternate scenario including the changed assumed variables, determining the present value of the future financial value stream based upon the alternate scenario, and comparing the present value of the future financial value stream based upon the alternate scenario to the first present value of the future financial value stream based upon the base case scenario [Figure 1 (#130-164), col. 19 lines 24-45, Col. 2 lines 44-59, col. 36 lines 32-51].

Re. Claim 6, Sandretto discloses selecting a stakeholder perspective from among a plurality of stakeholder perspectives for determining the first and second present values of the future financial value stream [Figures 11-14, col. 34 lines 6-50, col. 36-52, col. 38 lines 20-35].

Re. Claim 50, Sandretto discloses selecting two or more stakeholder perspectives from among a plurality of stakeholder perspectives for determining the first and second

Art Unit: 3693

present values of the future financial value stream [Figures 11-14, col. 34 lines 6-50, col. 36-52 (see book values, financial statements, income statement)].

Re. Claim 51, Sandretto discloses determining a variance between the first present value and the selected updated present value taking into account the time value of money between the first and second dates, and attributing the variance between the first present value and the selected updated present value to events that occurred between the first and second dates [col. 29 lines 52-64, col. 30 lines 5-53, col. 39 lines 42-51].

Re. Claim 52, Sandretto discloses determining a present value of each of a plurality of additional future financial value streams, and aggregating the present value of the first future financial value stream and the plurality of additional future financial value streams to form an aggregate present financial value of future financial values streams [Figure 2 (#250, 260), col. 19 line 63 to col. 20 line, col. 26 line 58 to col. 27 line 30].

Claims 4, 12, 25, 31, 40 & 47 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Sandretto as applied to claims 1, 9, 21, 29, 37 & 44 above, in view of Pilipovic (US 6,456,982).

Re. Claims 4, 12, 25, 31, 40 & 47, Sandretto discloses determining a present value of the future financial value stream by aggregating influences on the future financial value

Art Unit: 3693

stream attributable to past events [col. 8 lines 21-35, col. 34 lines 67]. Sandretto explicitly, does not disclose determining a reliability index that is indicative of relative magnitudes of the present value of the future financial value stream attributable to past events and the present value of the future financial value stream attributable to future events. However, Pilipovic discloses determining a reliability index (projection distribution) that is indicative of relative magnitudes of the present value of the future financial value stream attributable to past events and the present value of the future financial value stream attributable to future events [Figure 14b, 14d, col. 1 line 21 to col. 2 line 50, col. 3 lines 30-38, col. 16 lines 10-16]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art in financial reliability and risk assessment to modify the disclosure of Sandretto and include reliability index, as taught by Pilipovic, to calculate and predict the uncertain future value forecast and goal to meet.

Response to Arguments

3. Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. This rejection is a result of appeal conference, which decided to open prosecution because of problem as stated in rejection of USC 101.

The prior art made of record and not relied upon is considered pertinent to applicant's

Art Unit: 3693

disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

US 2005/0119922 (Eder) discloses an automated system and method for analyzing, modeling and valuing elements of a business enterprise on a specified valuation date. The performance of the elements are analyzed using search algorithms and induction algorithms to determine the value drivers associated with each element. The induction algorithms are also used to create composite variables that relate element performance to enterprise revenue, expenses and changes in capital. Predictive models are then used to determine the correlation between the value drivers and the enterprise revenue, expenses and changes in capital. The correlation percentages for each value driver are then multiplied by capitalized value of future revenue, expenses and changes in capital, the resulting numbers for each value driver associated with each element are then added together to calculate a value for each element.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T. Dass whose telephone number is 571-272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James A. Kramer can be reached on 571-272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3693

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Harish T Dass
Examiner
Art Unit 3693

Harish T Dass

01/06/2007

Attachment A

Requirement for Information Under 37 C.F.R. § 1.105

1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.
2. In view of the nature of Applicant's attorney assertion during interview (paper # 20061130), a question of public use under 35 U.S.C. 102(b) is raised. Review of the prior art by Eder (see conclusion above) discloses valuing enterprise which accounts for future value of the company that includes future income projections and liabilities.
3. The information is required to identify products and/or services embodying the disclosed subject matter of providing bases for evaluating present application. In response to this requirement please provide any known publications, papers, brochures, accounting texts, manual and press releases that describe the "present value", "future value", corporation projection, re-assessing projections, and calculating aggregating future collectable (for example, mortgage companies calculations of stream of collectible for 3 months, 6 months, 1 year, 5 years, 30 years etc.) Examiner search has found document that shows calculating future value as prior art, see bellow.
4. The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of the requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any

Art Unit: 3693

supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97 where appropriate.

5. In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

6. The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete reply to the requirement for that item.

7. This requirement is subject to the provisions of 37 CFR 1.134, 1.135 and 1.136 and has a shortened statutory period of 2 months. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Appendix A (continue)

calculating present value or worth of future sums of money is known to one skill in the art:

principal or present value = future value $\div \{1/(1+\text{interest rate})^{\text{number of account period}}\}$

or mathematically written

$$P = F / \{1/(1+i)^n\}, \text{ where } F, i \text{ and } n \text{ are variables}$$

and it is obvious that present value for number of cashflows (principals) are the sum of the cashflows (e.g. $P_1(F_1, i_1, n_1) + P_2(F_2, i_2, n_2) \dots P_m(F_m, i_m, n_m)$).

Reference: Jae K Smith and Joel G. Siegel "Financial Management", Second Edition, Barrons, 2000, pp 97-114

Steven N.Kaplan and Richard S Ruback "The valuation of cash flow forecasts: An Empirical Analysis", The Journal of Finance, Vol. 50, No.4 (Sep., 1995, pp. 1059-1093.